



This document includes Section 12.0 – QST 35 Class: Navy and U.S. Coast Guard Spark Ignition Inboards Vessels, of the Draft EPA Report “Surface Vessel Bilgewater/Oil Water Separator Characterization Analysis Report” published in August 2003. The reference number is: EPA-842-D-06-017

**DRAFT**  
**Characterization Analysis Report**  
**Surface Vessel Bilgewater/Oil Water**  
**Separator**

Section 12.0 – QST 35 Class: Navy and U.S. Coast Guard  
Spark Ignition Inboards Vessels

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## **SECTION 12.0 – QST 35 CLASS**

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## 12.0 QST 35 CLASS

The QST-35 SEPTAR 56 was selected as the representative vessel for the Boats with SI Inboard Engines class. With 25 vessels in service, the TD 56 (QST-35) is the second largest class in the group. The class is equipped with four Mercruiser engines. All other vessels in the class are equipped with either one or 2 engines. The naval architecture terminology used to describe general vessel characteristics are further defined in the “Naval Architecture Guide for Modeling Purposes” (Navy, 2001a). General vessel characteristics under full load condition for QST 35 Class are provided below.

### General Vessel Characteristics (Navy, 2001a):

Draft (ft):	2
Length at waterline (ft):	56
Beam at waterline (ft):	14
Displacement (tons):	17.79

This group consists of at least 78 boats powered with SI inboard engines. Two Coast Guard vessel classes and three Navy vessel classes make up this vessel group. For more information about the vessel group and the selection of the representative vessel class, see the *Vessel Grouping and Representative Vessel Class Selection for Surface Vessel Bilgewater/Oil-Water Separator Discharge* (Navy and EPA, 2001a). Vessels in this group receive fluids in the bilge from condensation that forms on the interior hull, and from leaking propeller shafts, pump packing glands, piping, valves, and flanges. This fluid may be contaminated with oily substances used to power and lubricate the propulsion and auxiliary engines.

The following marine pollution control devices (MPCDs) passed the screening process, described in the *Marine Pollution Control Device Screen Criteria Guidance* (Navy and EPA, 2000b), and were determined to be viable options in the feasibility analysis for the vessel group (see the *Feasibility Impact Analysis Report Surface Vessel Bilgewater*, hereafter referred to as the Bilgewater FIAR) (Navy and EPA, 2002b)

- Filter Media (Navy and EPA, 2001f)
- *In situ* biological treatment (Navy and EPA, 2001d)
- Collection, Holding, and Transfer (CHT) (Navy and EPA, 2001c)

As determined in the Bilgewater FIAR, the CHT option is a feasible MPCD for this vessel group and is presently being practiced by vessels in this group. Application of this MPCD option involves shore-side treatment of collected bilgewater at a properly permitted facility, and as a result there is no direct discharge to the receiving waters. As a result, for the QST 35 Vessel group, the need for further characterization was considered to be superfluous.